LANCOM 1781EW+

Quick Reference Guide

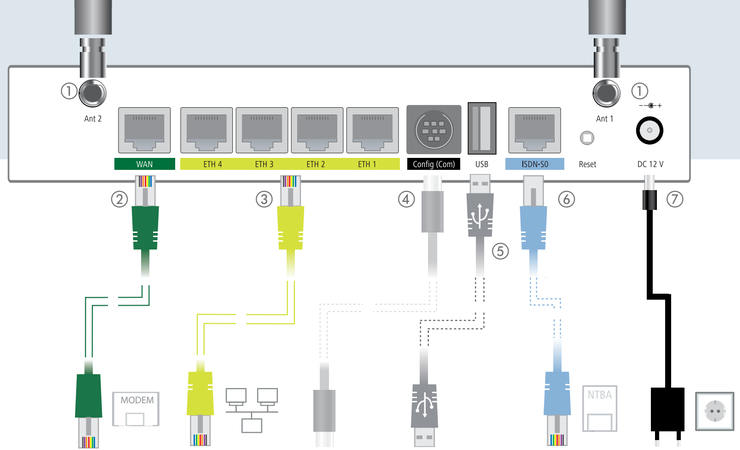
LANCOM
Systems

Please observe the following when setting up the device

- For devices to be operated on the desktop, please attach the adhesive rubber footpads
- Do not rest any objects on top of the device

- Keep the ventilation slots on the side of the device clear of obstruction
- In case of wall mounting, use the drilling template as supplied

- Rack installation with the optional LANCOM Rack Mount (not supplied)



① WLAN antennas
Screw the WLAN antennas supplied to the connectors Ant1 and Ant2. Depending on how the antennas are to be used, the 'Antenna Grouping' parameter may need to be configured in order provide the desired MIMO behavior.

② WAN
Connect the WAN interface to your WAN modem using the cable with the green connectors.

③ LAN
Use the cable with the kiwi-colored connectors to connect one of the interfaces ETH1 to ETH4 to your PC or a LAN switch.

④ Optional: Serial configuration cable
You can connect the device to a PC with a configuration cable (available separately).

⑤ Optional: USB
You can use the USB interface to connect a compatible USB cellular modem, a USB printer or a USB flash drive for device configuration.

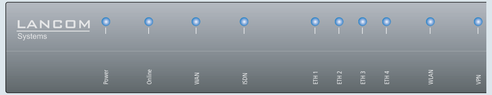
⑥ ISDN cable
Use the ISDN cable with the light-blue connectors to connect the ISDN interface to the NTBA if you wish to use ISDN.

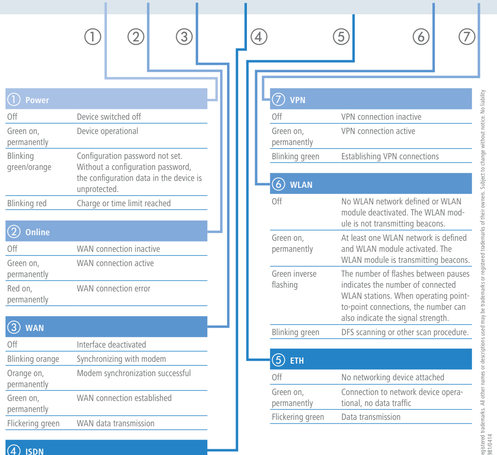
⑦ Power
When connecting the cable to the device, turn the bayonet connector 90° clockwise until it clicks into place.

Use only the supplied power adapter.

If you operate separately purchased antennas, please ensure that you do not exceed the maximum allowed transmission power for your system. The system operator is responsible for adhering to the threshold values. Antennas are only to be attached or changed when the device is switched off. Mounting or demounting antennas while the device switched on may cause the destruction of the WLAN module!

MOUNTING AND CONNECTING THE DEVICE





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TECHNICAL DATA

Hardware	
Power supply	12 V DC, external power adapter (230 V) with bayonet connector to secure against disconnection
Power consumption	Max. ca. 12.5 W
Environment	Temperature range 5–40 °C; humidity 0–95 %; non-condensing
Housing	Robust synthetic housing, rear connectors, ready for wall mounting, Kensington lock; measures 210 × 45 × 140 mm (W × H × D)
Number of fans	None; fanless design, no rotating parts, high MTBF
Wireless LAN	
Frequency band	2400–2483.5 MHz (ISM) or 5150–5825 MHz (restrictions vary between countries)
Radio channels 2.4 GHz	Up to 13 channels, max. 3 non-overlapping (2.4-GHz band)
Radio channels 5 GHz	Up to 26 non-overlapping channels (channels available vary according to country regulations; DFS for automatic dynamic channel selection required)
Interfaces	
WAN	10/100/1000 Mbps Gigabit Ethernet
ETH	4 individual ports, 10/100/1000 Mbps Gigabit Ethernet, by default set to switch mode. Up to 3 ports can be operated as additional WAN ports. Ethernet ports can be electrically disabled in the LCOS configuration. The ports support the energy-efficient features as per IEEE 802.3az.
USB	USB 2.0 Hi-Speed host port for connecting USB printers (USB print server), serial devices (COM-port servers), USB data media (FAT file system), or supported UMTS USB modems
ISDN	ISDN-S_0 bus
Config (Com)	Serial configuration interface / COM port (8-pin Mini-DIN): 9,600–115,000 baud, suitable for optional connection of analog/GPRS modems. Supports the internal COM-port server.
Ant1, Ant2	Two reverse SMA connectors for the supplied dipole antennas, LANCOM AirLancer Extender antennas or for antennas from other vendors. Please respect the restrictions which apply in your country when setting up an antenna system. For information about calculating the correct antenna setup, please refer to www.lancom.eu.
WAN protocols	
Ethernet	PPPoE; Multi-PPPoE; ML-PPP; PPTP (PAC or PNS) and IPoE (with or without DHCP); RIP-1; RIP-2; VLAN; IP; IPv6 over PPP (IPv6 and IPv4/IPv6 dual stack session); IPoE (auto-configuration, DHCPv6 or static); tunnelling protocols (IPv4/IPv6) 6to4, 6in4, 6rd (static and via DHCP)
ISDN	1TR6, DSS1 (Euro- ISDN), PPP, X75, HDLC, ML-PPP, V.110/GSM/HSCSD
Declaration of conformity	
CE	EN 301 489-1, EN 301 489-17, EN 60950-1
2.4 GHz WLAN	EN 300 328
5 GHz WLAN	EN 301 893
Notifications	Certifications notified in Denmark, Germany, Finland, France, Greece, UK, Ireland, Liechtenstein, Luxembourg, Malta, Netherlands, Norway, Portugal, Sweden, Switzerland, Cyprus
Package content	
Manual	Quick Reference Guide (DE/EN), Installation Guide (DE/EN/FR/ES/IT/PT/NL)
CD/DVD	Management software (LANconfig, LANmonitor) and documentation
Cable	2 Ethernet cables, 3 m (LAN: kiwi-colored connectors; WAN: green connectors)
Cable	1 ISDN cable, 3 m (light-blue connectors)
Antennas	Two external 3 dBi dipole dualband antennas, one internal 3 dBi dipole dualband antenna
Power adapter	External power adapter (230 V); NEST 12 V/1.5 A DC/S; coaxial power connector 2.1/5.5 mm bayonet; LANCOM item no. 110723 (EU); LANCOM item no. 110829 (UK)

License information for the device firmware (LCOS) is available on the data medium supplied.